

AMENDMENTS TO THE CLAIMS

This listing of claims replaces all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) In a computing environment, a method comprising:
receiving a plurality of access points to distributed services that match specified criteria, the access points provided by a service registry;
maintaining the plurality of access points in a cache;
receiving a request from a program to provide an access point; and
in response to the request, selecting an first access point from the cache and returning data corresponding to the first access point to the program; and
upon receiving information from the program that a distributed service corresponding to the first access point has failed, selecting a second access point from the cache and returning data corresponding to the second access point to the program, and marking the first access point corresponding to the failed distributed service such that the first access point is not subsequently selected from the cache.
2. (Original) The method of claim 1 further comprising, receiving the specified criteria from the program, and sending a query to the service registry based on the criteria.
3. (Original) The method of claim 2 further comprising, receiving the plurality of access points from the service registry in response to the query.
4. (Original) The method of claim 2 wherein the service registry comprises a UDDI-based registry, and wherein sending the query to the service registry comprises sending an UDDI find request.
5. (Original) The method of claim 4 wherein the plurality of access points is provided by service registry in a list of URLs, and wherein returning data corresponding to the access point comprises returning data comprising a URL.

6. (Original) The method of claim 1 wherein returning data corresponding to the access point comprises returning a network address of a computer system.

7. (Original) The method of claim 1 wherein returning data corresponding to the access point comprises returning an identifier that can be resolved by some mechanism to an application or a particular instance of an application.

8. (Original) The method of claim 1 wherein receiving a request from a program for an access point comprises receiving a call at a defined interface.

9. (Original) The method of claim 1 wherein selecting the access point from the cache comprises maintaining the access points in an ordering, and choosing the access point based on the ordering.

10. (Original) The method of claim 9 further comprising, basing the ordering on data received from the program.

11. (Original) The method of claim 9 further comprising, basing the ordering on quality of service data.

12. (Original) The method of claim 9 wherein choosing the access point based on the ordering comprises choosing the access point that is first in the ordering of those access points that have not been marked as having failed.

13. (Original) The method of claim 9 wherein choosing the access point based on the ordering comprises choosing the access point that is next in the ordering.

14. (Canceled)

15. (Currently Amended) The method of claim 1[[4]] further comprising updating the service registry based on the failure data.

16. (Canceled)

17. (Currently Amended) The method of claim 1[[4]] wherein outputting failure data comprises communicating with an error handling service.

18. (Original) The method of claim 17 further comprising collecting failure information at the error handling service.

19. (Currently Amended) The method of claim 1[[4]] wherein receiving information that a distributed service has failed comprises receiving a call at a defined interface.

20. (Currently Amended) A computer-readable storage medium having stored computer-executable instructions for performing the method of claim 1.

21. (Currently Amended) In a computer network in which a service registry provides access points to distributed services for use by client programs, a system comprising:

a storage that maintains ~~at least one~~ a plurality of access points provided by the service registry;
and

a manager component coupled to the client program, the manager component configured to perform the following:

receive a request for an access point from the client program; ~~and to provide an~~
in response to the request, select a first access point from the storage in response to the request
and provide the first access point to the client program;

receive information from the client program that a distributed service corresponding to the first access point has failed;

in response to the information, select a second access point from the storage and provide the second access point to the client program, and mark the first access point as having failed such that the first access point is not subsequently provided in response to a request for an access point.

22. (Original) The system of claim 21 wherein the manager component comprises an instantiated object.

23. (Original) The system of claim 22 wherein the storage comprises a list maintained in storage allocated to the manager component object.

24. (Original) The system of claim 21 wherein the client program hosts the manager component.

25. (Original) The system of claim 21 wherein the manager component is coupled to the client program via a defined interface that receives the request for the access point.

26. (Original) The system of claim 21 wherein the service registry comprises a UDDI-based registry.

27. (Currently Amended) The system of claim 21 wherein the manager component receives specified criteria from the client program, sends a query to the service registry based on the criteria, and receives ~~at least one~~ a plurality of access points in response to the query.

28. (Original) The system of claim 27 wherein the service registry comprises a UDDI-based registry, wherein the query comprises a UDDI find request, and wherein each access point received in response to the query comprises a URL string.

29. (Canceled)

30. (Currently Amended) The system of claim 21[[7]] wherein the selection of the first and second access points is based on an ordering scheme.

31. (Original) The system of claim 21 wherein the manager component includes a defined interface for receiving failure-related calls related to a distributed service.

32. (Original) The system of claim 31 wherein at least one failure-related call includes information that indicates the failure.

33. (Original) The system of claim 31 further comprising an error handling service, the manager component providing failure information to the error handling service including information that indicates which service failed.

34. (Original) The system of claim 33 wherein the error handling service collects the failure information, and updates data associated with the service registry and corresponding to the service that failed.

35-36. (Canceled)

37. (Currently Amended) In a computing environment, a system comprising:

a memory containing a service registry that provides access points to services in response to requests; and

a manager component comprising an object hosted by an application program, the manager component maintaining a list of access points that are obtained by sending a query to the service registry based on criteria from the application program, the manager component including an interface by which the application program makes a request for ~~[[an]]~~ a first access point and the manager component returns one of the access points from the list to the application program in response to the request, the manager component further including an interface by which the application program indicates that a distributed service corresponding to the first access point has failed and in response, the manager component returns a second access point from the list to the application program, and marks the first access point as having failed such that the first access point is not subsequently provided in response to a request for an access point.

38. (Original) The system of claim 37 wherein the service registry comprises a UDDI service registry, wherein the query comprises a find request, and wherein the access points comprises URLs returned from the UDDI service registry.

39. (New) The method of claim 1 wherein each of the distributed services provides a service that matches the specified criteria such that any one of the distributed services is interchangeable with another of the distributed services.